

# Nanopublication — Computational Image Analysis - AQC0607

by Arnaud Quercy · Ab minor - Research on Harmony · 2024

## Claim 1: Computational Image Analysis - AQC0607

The artwork *Ab minor - Research* [1] on Harmony (AQC0607) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

### CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 2650x3534 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	77777C	33.0	gray	dusty mauve
2	3E294C	15.6	violet	dusty mauve
3	969394	12.4	gray	lightslategray
4	666368	11.4	gray	dusty mauve
5	C2BDB7	9.0	gray	silver
6	75BB09	6.4	yellow-green	olivedrab
7	ECEAE5	5.3	white	white
8	78D74F	3.8	yellow-green	yellowgreen
9	AFEA16	1.6	yellow-green	greenyellow
10	E1ED6C	1.5	yellow	khaki
11	ECCDB3	0.3	orange	wheat [Accent]
12	663666	0.3	red-violet	dusty mauve [Accent]
13	3E301B	0.3	yellow-orange	darkslategray [Accent]

### Color Families:

Family	%
gray	65.9
violet	15.6
yellow-green	11.8
white	5.3
yellow	1.5
orange	0.3
red-violet	0.3
yellow-orange	0.3

### Accent Colors:

Hex	Family	Name	Chroma
ECCDB3	orange	wheat	18.4

Hex	Family	Name	Chroma
663666	red-violet	dusty mauve	34.7
3E301B	yellow-orange	darkslategray	16.3

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.197
Mean Local Roughness	0.047
Roughness Uniformity	0.049
Edge Density	0.153
Mean Gradient Magnitude	0.348
Gradient Variance	0.217
Gradient Smoothness	0.0
Directional Coherence	0.034
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.674
Spatial Variation	0.128
Texture Consistency	0.628

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.508
Brightness Variance	0.197
Brightness Uniformity	0.613
Brightness Skewness	0.298
Brightness Entropy	7.359
Rms Contrast	0.197
Michelson Contrast	1.0
Weber Contrast	0.724
Mean Local Contrast	0.049
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.694
Shadow Percentage	16.957
Midtone Percentage	62.912
Highlight Percentage	20.13
Shadow Clipping	0.002
Highlight Clipping	0.6
Tonal Balance	0.0
Fine Contrast	0.029
Medium Contrast	0.061
Coarse Contrast	0.087
Multiscale Contrast Ratio	0.334
Edge Contrast	0.348
Contrast Clustering	0.372

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.77
Color Clustering	0.281
Color Transition Smoothness	0.125
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.039
Mean Saturation	0.231
Saturation Variance	0.083
Low Saturation Ratio	0.694
Medium Saturation Ratio	0.222
High Saturation Ratio	0.084
Saturation Clustering	0.999
Hue Concentration	0.155
Complementary Balance	0.082
Analogous Dominance	0.498
Temperature Bias	0.08

## Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

## REFERENCES

- [1] Arnaud Quercy (2024). Ab minor - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0607.html>
- [2] Quercy, A. (2024). Ab minor - Research on Harmony - Gallery. [https://artquamanima.com/en/artworks/2024/01/ab-minor-research-on-harmony\\_6sa.html](https://artquamanima.com/en/artworks/2024/01/ab-minor-research-on-harmony_6sa.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

## EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

## CHECKSUM (SHA-256)

0f510f2b06b77756b6deaf3a5b814da6aa105860c93a03b9c97e307b0a1e963d

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240602-0103
Asset code	AQC0607
Version	1
Published	2026-02-03

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — [publishing.artquamanima.com](https://publishing.artquamanima.com)

Date of publication: 2026-04-20

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0607-computational-image-analysis-aqc0607.pdf>

Content available under Creative Commons Attribution-NonCommercial 4.0 License (CC BY-NC 4.0)